

Title (en)
SPECTRALLY FILTERED EYEWEAR

Title (de)
SPEKTRAL GEFILTERTE BRILLE

Title (fr)
LUNETTES À FILTRAGE SPECTRAL

Publication
EP 3224658 A4 20180711 (EN)

Application
EP 15862684 A 20151119

Priority
• US 201462085577 P 20141130
• US 2015061692 W 20151119

Abstract (en)
[origin: WO2016085767A1] A laser protection lens includes a multilayer interference coating applied to at least one of an inside and an outside surface of an optically transparent material. The multilayer interference coating has a spectral filter profile with at least a 20dB reduction of optical transmission for at least two different center wavelengths of commercial high power lasers, while having a transmittance color difference greater than 40 ΔE_{Yuv} for discrimination color difference of red, green and yellow indicator lights, and having spectral transmittance that passes light detected by l-cones of an eye, while attenuating light detected by m-cones and s-cones of the eye so as to improve visual acuity.

IPC 8 full level
G02B 5/20 (2006.01); **G02B 1/10** (2015.01); **G02B 3/00** (2006.01); **G02B 5/28** (2006.01); **G02C 7/04** (2006.01); **G02C 7/10** (2006.01)

CPC (source: EP US)
G02B 5/285 (2013.01 - EP US); **G02C 7/049** (2013.01 - US); **G02C 7/10** (2013.01 - US); **G02C 7/104** (2013.01 - EP US);
G02C 7/107 (2013.01 - US); **G02C 2202/16** (2013.01 - US)

Citation (search report)
• [X] US 5966240 A 19991012 - LANGE MARK H [US], et al
• [A] FR 2765696 A1 19990108 - THOMSON CSF [FR]
• [A] WO 2010077411 A1 20100708 - GENTEX CORP [US], et al
• [A] EP 0540215 A2 19930505 - MINNESOTA MINING & MFG [US]

Citation (examination)
• GB 2261523 B 19931208 - BARR & STROUD LTD [GB]
• See also references of WO 2016085767A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2016085767 A1 20160602; EP 3224658 A1 20171004; EP 3224658 A4 20180711; US 9829724 B1 20171128

DOCDB simple family (application)
US 2015061692 W 20151119; EP 15862684 A 20151119; US 201514946633 A 20151119